

**U.S. Application No. 10/702,441
(Attorney Docket No. 05725.1257)**

Inventor: Gaëlle BRUN et al

Title: Cosmetic Composition Comprising at Least One Cyclic Carbonate

Interview October 5, 2009

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- **Status:**

- Final Office Action mailed May 27, 2009.

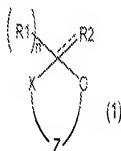
- **Claims:** **Claims 1-9, 11-15 and 17-34 are pending**

- Claims 1-9, 11-15 and 17-34 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement, on the ground that elements excluded are not positively recited in the specification. *See* Final Office Action at 2-3.
- Claim 13 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, on the ground that the compounds (v) in claim 13 contradict the proviso compounds in claim 1. *See id.* at 3-4.
- Claims 1-9, 11-15 and 17-34 are rejected under 35 U.S.C. § 103(a) over JP 2001158724 to Megumi et al. (“Megumi”). *See id.* at 4-7.

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Applicants propose to amend claim 1 as follows:

- A method for treatment of at least one of hair, eyelashes, skin and nails, comprising applying to said hair, eyelashes, skin and/or nails a composition comprising, in a cosmetically acceptable medium, at least one cyclic carbonate of Formula (1) capable of polymerizing under an external stimulus:



wherein:

- X is chosen from O and S;
- n is chosen from 0 and 1;
- R2 is chosen from O, S, OR3, and SR3;
- R1 and R3, which may be identical or different, are chosen from linear or branched C₁ to C₃₀ alkyl radicals, optionally substituted by at least one entity chosen from halogens and from amine, hydroxy, carboxy, C₁ to C₁₀ alkoxy, thiol, and C₆ to C₂₀ aryl groups;
- R1 may form a heterocycle together with R2;
- Z is chosen from divalent linear or branched C₂ to C₃₀ alkylene radicals, optionally interrupted by at least one heteroatom, and optionally substituted by at least one radical chosen from hydroxy, C₆ to C₃₀ aryl, amino, carboxy, halogen, C₂ to C₁₀ alkoxy, and thiol radicals; and
- R2 optionally forms a heterocycle together with an atom of Z, the heterocycle being optionally substituted, and optionally comprising at least one heteroatom;

wherein the compounds of Formula (1) comprise fewer than four fused rings and wherein, if X is O, R2 is O, and n is 0, then Z is not ethylene optionally substituted by at least one radical chosen from C₂-C₄ alkyl and -CH₂(OR₄), OR₅ wherein R₅ is hydrogen or C₁-C₂₂ saturated or unsaturated hydrocarbon, R₄ is a C₂-C₄ alkylene, and m is an integer ranging from 0-13 isopropylene, propylene, 2-hydroxypropylene, or isopropyl-2,2'-dimethylpropylene, or CH₂-CH(R'') wherein R'' is a linear C₁-C₂₂ alkyl interrupted by at least one heteroatom, and optionally substituted by a hydroxy at the terminal carbon.

Proviso Language, as Proposed, is Properly Supported by the Specification

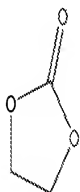
- wherein, if X is O, R2 is O, and n is 0, then Z is not.... CH₂-CH(R'') wherein R'' is a linear C₁-C₂₈ alkyl interrupted by at least one heteroatom, and optionally substituted by a hydroxy at the terminal carbon.

The above underlined proviso language is properly supported by the specification on the ground that

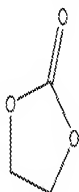
- M.P.E.P. § 2173.05(i) indicates that “a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of description support.” (citing *Ex parte Parks*, 30 USP2d 1234, 1236 (Bd. Pat. App. & Inter. 1993));
- paragraph [0025] of the published application, US 2004/0156800, states that “Z is chosen from divalent or branched C2 to C30 alkylene radicals . . . “ thus, Z can be CH₂-CH(R''), a formula also recited in paragraph [0039] of the published application, though with different range of R'';
- given that Z is chosen from “divalent linear or branched C₂ to C₃₀ alkylene radicals” as discussed above, it is immediately envisaged that R'' can be a C₁-C₂₈ alkyl radical;
- the elements “interrupted by at least one heteroatom” and “substituted by a hydroxyl” are all positively described in paragraph [0025] of the published application, and thus can be excluded as currently written; and
- applicants assert that they are simply claiming less than the full scope of the disclosure – a legitimate procedure for inventors entitled to decide the bounds of protection they seek. See, e.g., *In re Johnson*, 558 F.2d 1008 (C.C.P.A. 1977).

Claim 13 is not Indefinite

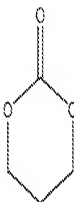
- Structures of proviso compounds in claim 1 as amended



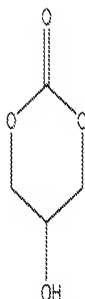
Z= ethylene



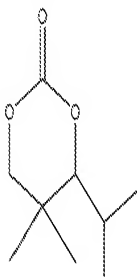
Z= isopropylene



Z= propylene



Z= 2-hydroxypropylene



Z= isopropyl-2,2'-dimethylpropylene



R'' is a linear C₁-C₂₈ alkyl interrupted by at least one heteroatom, and optionally substituted by a hydroxy at the terminal carbon.

- Structure of compound v in claim 13

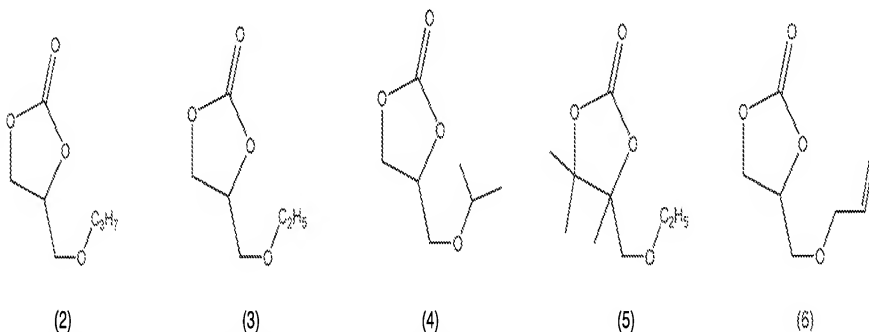


R, and R' are C₁₋₄ alkyl

Conclusion: proviso compounds in claim 1 and compound (v) in claim 13 differ from each other. Claim 13 is thus definite.

Megumi does not Render Claims 1-9, 11-15 and 17-34, as Amended as Proposed, Obvious (I)

- Megumi described a hair dye composition comprising, among other things, several cyclic carbonates labeled as (2)-(6) shown above paragraph [0019] of the English translation copy of Megumi provided by the Office, which are also depicted below: they all are cyclic carbonate substituted with alkoxy.



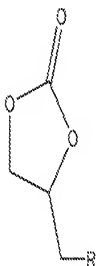
Current claim 1, as amended as proposed, recites, in relevant part:

Z is chosen from divalent linear or branched C_2 to C_{30} alkylene radicals . . . , optionally substituted by at least one radical chosen from hydroxy, C_6 to C_{30} aryl, amino, carboxy, halogen, C_4 to C_{40} alkoxy, and thiol radicals.

Conclusion: the cyclic carbonates encompassed in the current claims, as amended as proposed, are distinguished from the specific cyclic carbonates taught by Megumi. Megumi does not teach or suggest any specific compounds which are encompassed in the current claims, as amended as proposed.

Megumi does not Render Claims 1-9, 11-15 and 17-34, as Amended as Proposed, Obvious (II)

- Megumi further describes a hair dye composition comprising, among other things, a compound of the following general formula

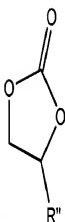


R is $(OR_2)_nOR_1$ or $(OR_2)_nOCOR_1$

when R is $(OR_2)_nOCOR_1$, the resulting compounds would fall outside the scope of the claims as recited either previously or as amended as proposed, because $-OCOR_1$ is acyloxy, which is not an element recited in the claims as recited previously, or as amended as proposed.

when R is $(OR_2)_nOR_1$, wherein R_1 is a hydrogen atom or C_1 - C_{22} hydrocarbon, R_2 is a $(CH_2)_{2-4}$, n varies from 0 to 30, R can be also described as, using the terms as recited in the current claims, an alkoxy or hydroxy (when n is 0), or an alkylene chain interrupted by at least one oxygen with the terminal carbon optionally substituted with hydroxyl.

- Current proviso compounds, as proposed



R'' is a linear C1-C28 alkyl interrupted by at least one heteroatom, and optionally substituted by a hydroxy at the terminal carbon. (when interrupted by only one heteroatom, for example, one oxygen, R'' comprises alkoxy.

Conclusion: the cyclic carbonates recited in the current claims, as amended as proposed, are distinguished from the generic cyclic carbonates taught by Megumi.

Based on the analysis presented on previous slide and this slide, Megumi does not teach or suggest any compounds, generic or specific, which are encompassed in the current claims, as amended as proposed. Megumi thus does not render obvious the current claims, as amended as proposed.